

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

GROSE et al.

Serial No. 09/646,224

Filed: September 14, 2000

Title: MAMMALIAN SODIUM CHANNEL PROTEINS

Atty Dkt. 1430-252

C# M#

Group Art Unit: 1647

Examiner: Holbrook

Date: August 13, 2002

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TECH CENTER 1600/2900

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

RESPONSE/AMENDMENT/LETTER

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

**Fees are attached as calculated below:**

Total effective claims after amendment previously paid for	0 20	minus highest number (at least 20) =	0	x	\$ 18.00	\$ 0.00
Independent claims after amendment previously paid for	0 3	minus highest number (at least 3) =	0	x	\$ 84.00	\$ 0.00
If proper multiple dependent claims now added for first time, add \$280.00 (ignore improper)						\$ 0.00
Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s) (\$110.00/1 month; \$400.00/2 months; \$1440.00/4 months)						\$ 1440.00
Terminal disclaimer enclosed, add \$ 110.00						\$ 0.00
<input type="checkbox"/> First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) (\$740.00) <input type="checkbox"/> Please enter the previously unentered , filed <input type="checkbox"/> Submission attached						<b>Subtotal</b> \$ 1440.00
If "small entity," then enter half (1/2) of subtotal and subtract <input type="checkbox"/> Applicant claims "small entity" status. <input type="checkbox"/> Statement filed herewith						-\$ 0.00
Rule 56 Information Disclosure Statement Filing Fee (\$180.00)						\$ 0.00
Assignment Recording Fee (\$40.00)						\$ 0.00
Other:						0.00
						<b>TOTAL FEE ENCLOSED</b> \$ 1440.00

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

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NIXON & VANDERHYE P.C.  
By Atty: B. J. Sadoff, Reg. No. 36,663

Signature: 



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

**GROSE et al.**

Atty. Ref.: **1430-252**

Serial No. **09/646,224**

Group: **1647**

Filed: **September 14, 2000**

Examiner: **Holbrook**

For: **MAMMALIAN SODIUM CHANNEL PROTEINS**

\* \* \* \* \*

**August 13, 2002**

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

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**RESPONSE**

**TECH CENTER 1600/2900**

Responsive to the Office Action dated March 15, 2002, the applicants elect, with traverse, the subject matter of the Examiner's Group II and SEQ ID NO:3, with traverse.

Reconsideration and withdrawal of the restriction requirement are requested in view of the following.

Initially, the applicants note that this application is a U.S. national phase of PCT/GB99/00838 such that the principles of unity of invention apply. The Examiner has appreciated the same however the restriction requirement fails to provide any justification for the restriction requirement other than the Examiner's unsupported assertion that the indicated Groups of claims (i.e., Groups I-IV) fail to "be so linked as to form a general inventive concept under PCT Rule 13.1." The Examiner has similarly asserted that restriction to one of the indicated sequences is "also required under PCT Rule 13.1." See, page 2 of the Office Action dated March 15, 2002 (Paper No. 13).

MPEP § 1893.03(d) (pages 1800-149, August 2001, copy attached) however requires  
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that the Examiner must "explain why each group lacks unity with each other group (i.e., why there is no single general inventive concept) specifically describing the unique special technical feature in each group." Emphasis added.

Reconsideration and withdrawal of the restriction requirement are requested as the Examiner has failed to provide support for the same by, for example, demonstrating, or even explaining, why each Group and sequence lacks unity with each other group and sequence. The Examiner is urged to appreciate the "reminder" of MPEP § 1893.03(d) that unity of invention "(not restriction) practice is applicable in international applications."

Section 1893.03(d) further explains as follows:

A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression special technical features is defined as meaning those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art. For example, a corresponding technical feature is exemplified by a key defined by certain claimed structural characteristics which correspond to the claimed features of a lock to be used with the claimed key. Note also examples 1-17 of Annex B Part 2 of the PCT Administrative Instructions as amended July 1, 1992 contained in Appendix A1 of the MPEP.

A process is "specially adapted" for the manufacture of a product if the claimed process inherently produces the claimed product with the technical relationship being present between the claimed process and the claimed product. The expression "specially adapted" does not imply that the product could not also be manufactured by a different process.

An apparatus or means is specifically designed for carrying out the process when the apparatus or means is suitable for carrying out the process with the technical

relationship being present between the claimed apparatus or means and the claimed process. The expression specifically designed does not imply that the apparatus or means could not be used for carrying out another process, nor does it imply that the process could not be carried out using an alternative apparatus or means.

The Examiner is further urged to review the examples of Annex B Part 2 of the PCT Administrative instructions, referred to above and attached, wherein Example 17, for example, indicates that unity exists between a claim to a "Protein X" and a claim to a "DNA sequence encoding protein X". At a minimum therefore, the claims of the Examiner's Groups I and II should be combined as, according to this Example, and without any basis from the Examiner to the contrary for lack of unity, the subject matter claimed in the Examiner's Groups I and II define a single inventive concept. Similarly, the sequences of the claims are submitted to define a single inventive concept.

Moreover, the Examiner is urged to appreciate that the sequences of SEQ ID NOs: 3-17 are human sequences which are all fragments of the same gene, such that even under the U.S. restriction practice, the sequences should not require restriction.

Finally, the applicants note that the subject matter of the claims of the Examiner's Group IV define a process of using the subject matter of the Examiner's Group I such that, according to the Administrative Instructions, the subject matter of Groups I, II and IV define a single inventive concept and should be examined together.

Reconsideration and withdrawal of the restriction requirement, and an early and favorable Action on the merits of all the claimed subject matter, are requested.

**GROSE et al.**  
**Serial No. 09/646,224**

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:



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